Soil and Water Remediation, Groundwater/Vadose Zone (RL-0030)

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BEFORE

AFTER

Before and after views of the cleanout of the 810 Laydown Yard

Overview

This section addresses Project Baseline Summary (PBS) RL-0030, *Soil and Water Remediation, Groundwater/ Vadose Zone.*

NOTE: Unless otherwise noted, all information contained herein is as of the end of September 2008.

Top FY 2008 Accomplishments

- **Well Decommissioning** Completed the performance incentive to decommission100 wells more than one month early; 103 wells were decommissioned in FY 2008 altogether. In addition, completed the FY 2008 contract deliverable for administrative well decommissioning; a total of 2.525 wells have been decommissioned.
- **Aquifer Tube Installation and Sampling** Completed all 51 sites as outlined in the Sampling Analysis Instructions.
 - Installation of the aquifer tubes will enable better sampling and monitoring of water entering the Columbia River from the Hanford Site.
- **Groundwater Monitoring Wells** Completed *Hanford Federal Facility Agreement and Consent Order* (Tri-Party Agreement) Milestone M-24-57P, "Complete 15 Groundwater Monitoring Wells by September 30, 2008" more than nine months ahead of time.
- **200-ZP-1 Pump and Treat** Completed the 200-ZP-1 Pump and Treat four-well expansion two weeks ahead of schedule.
- **100-NR-2 Apatite Barrier Injections** Completed the 100-NR-2 apatite barrier injections for chromium 6 plume control six weeks ahead of schedule.

Notable September Accomplishments

River Corridor

- 100-D Remedial Process Optimization The Technical and Cost Evaluation was submitted to RL on September 12, 2008, all elements of this PI have now been completed.
- HR-3/KR-4 Explanation of Significant Difference (ESD) The FH to RL letter transmitting cost data supporting the ESD was signed on September 10, 2008.
- Integrated 100 Area RI/FS Work Plan (Final RODs) 100 Area Integrated RI/FS Work Plan:
 The Decisional Draft A was posted for RL review on September 6. The updated Section 3.3 was submitted and reviewed with RL on September 18, 2008.
- 100-NR-2 Response to Ecology's comments on the Eco Risk assessment have been completed and transmitted to Ecology. Revisions to the Eco Risk document have begun.
- KX Expansion Pump-and-Treat System The bulk of the construction activity was completed on September 22, 2008

Notable September Accomplishments, continued

Central Plateau

- 200-BC-1 Completed all 16 Direct Push Technology (DPT) boreholes and the gamma and neutron logging in the B-53 trench. Completed the eight DPT boreholes and slim-line gamma logging in the B-14 Crib footprint.
- 200-CW-1 Geophysical logging has been completed in the four shallow DPT boreholes in 216-T-4B, and five in B Pond were completed September 18, 2008.
- 200-IS-1 All 68 direct pushes are complete and all logging has been completed.
- **Integration** Completed 83 percent of baseline wells to be sampled (2024 of 2403 wells).

FY 2008 Funds vs. Actuals (\$M)

	September 2008 Actual Funding	FY 2008 Actual Costs	Variance		
Soil and Water Remediation, Groundwater/ Vadose	\$ 113.7	\$ 106.4	\$ 7.3		

Schedule/Cost Performance (\$M)

Soil & Water Remediation, Groundwater/Vadose Zone	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule	Schedule Variance %	Cost Variance \$	Cost Variance %	Budget At Completion (FY08/ CTD)
Current Period (Month)	\$11.1	\$13.2	\$15.4	\$2.1	18.8%	-\$2.2	-16.4%	\$103.0
Cumulative-to-Date (FY 2004-Present)	\$311.6	\$307.1	\$308.7	-\$4.4	-1.4%	-\$1.5	-0.5%	\$311.6

Numbers are rounded to the nearest \$0.1M and include the Closure Services allocation.

CTD Schedule Performance (-\$4.4/-1.6%):

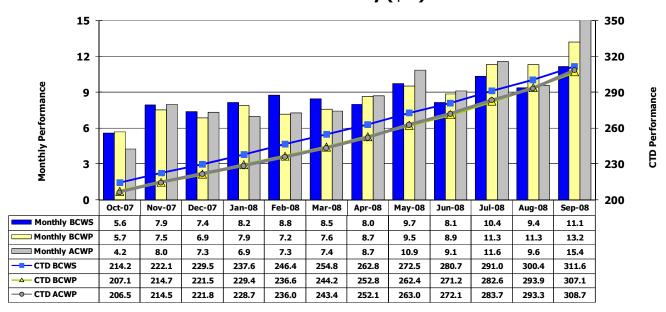
- The CTD schedule variance is primarily due to:
 - Well drilling delays were due to delayed regulator approval of well locations and Sampling Analysis
 Plans
 - Prior month delays in placement of contracts for Groundwater/Vadose Zone Integration support;
 - Delayed start of 200-BP-5 high-risk "K" well due to worker safety concerns associated with summer temperatures;
 - Delayed procurement of the 200-ZP-2 soil vapor extraction replacement system.

Schedule/Cost Performance (\$M), continued

CTD Cost Performance (-\$1.5M/-0.5%):

- The CTD cost variance is attributable to:
 - Project growth exceeding the plan and various prior year project overruns for Integrated Field Work, Groundwater Monitoring & Performance, and well drilling offset by efficiencies in pump and treat operations and overhead passbacks;
 - Underruns associated with the Closure Services allocation.

Performance Analysis CTD and Monthly (\$M)



Milestone Achievement

Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) milestones represent significant events in project execution. DOE Enforceable Agreement milestones were established to provide high-level visibility to critical deliverables and specific status on the accomplishment of these key events. The FY 2008 Enforceable Agreement milestone information provided herein is based upon the current baseline including RL-approved changes. Changes from month-to-month in both the total number of milestones to be completed and in the forecast status of upcoming milestones are the result of Baseline Change Requests approved during the reporting period.

Number	Milestone Title	Туре	Due Date	Actual Date	Forecast Date	Status/ Comments
M-024-57M	Install a Cumulative of 60 Wells	TPA	12/31/07	4/6/07		Complete
M-015-50	Submit a Treatability Work Plan for Deep Vadose Zone Technetium and Uranium to Ecology and EPA	TPA	12/31/07	12/22/07		Complete